

Protein Linked to Normal Prostate Stem Cells and to Cancer

Posted: December 2, 2010

Created: 02/12/2010 - 16:18

When I was the editor of a national magazine for physicians, I told my writers to do any story they found on prostate issues, with our overwhelming male audience then, I knew those stories would get high readership scores. My readers back then would have loved today's news out of UCLA. The team there, led by CIRM grantee Owen Witte, found that the inhibition of a certain protein slowed the growth of an aggressive form of prostate cancer in animal models.

Scientifically, though the immediate excitement is over the double life this protein leads normally in the prostate. It regulates self-renewal of normal prostate stem cells needed to repair any injured cells. But it also aids the transformation of healthy cells into prostate cancer cells. The protein, called Bmi-1, has been associated with higher grade cancers and is predictive of poor prognosis. A UCLA press release quotes Witte as saying:

“ We conclude by these results that Bmi-1 is a crucial regulator of self-renewal in adult prostate cells and plays important roles in prostate cancer initiation and progression. It was encouraging to see that inhibiting this protein slows the growth of even a very aggressive prostate cancer, because that could give us new ways to attack this disease.”

You can view a video about attempts to attack cancer stem cells here:

Cell Stem Cell, December 3, 2010

CIRM funding: Rita U. Lukacs (T1-00005, TG2-01169)

D.G.

Tags: Cancer, UCLA, Training, Witte, University of California Los Angeles, prostate, bmi-1

Source URL: <https://www.cirm.ca.gov/blog/12022010/protein-linked-normal-prostate-stem-cells-and-cancer>